



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,800	12/30/2003	Truman Dean Hainline	10226-006	2088
29493	7590	09/10/2004	EXAMINER	
HUSCH & EPPENBERGER, LLC 190 CARONDELET PLAZA SUITE 600 ST. LOUIS, MO 63105-3441			LANGDON, EVAN H	
			ART UNIT	PAPER NUMBER
			3654	

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/748,800	Applicant(s) HAINLINE, TRUMAN DEAN	
	Examiner Evan H Langdon	Art Unit 3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/5/04, 12/30/03</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the four second wore guides of claims 15 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 7-15 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindsay (US 3,322,164) in view of Greczin (US 4,142,352).

In regards to claim 1, Lindsay discloses a coil winding machine for wrapping at least one coil wire around a core wire 4, the coil winding machine comprising:

a spindle head 6,7;

a flywheel 9 rotatably connected to said spindle head, the flywheel having at least one wire spool 20 for holding the at least one coil wire and at least one first wire guide 22; and

an applicator head 23 for wrapping the at least one coil wire around the core wire 4, the applicator head operatively connected to the flywheel for rotation therewith.

Greczin teaches a flywheel 42 and a non-rotatable spindle nose operatively connected to a spindle head and a core wire traveling through the spindle nose, as seen in Figure 1.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the spindle head of Lindsay to include a non-rotatable spindle nose as suggested by Greczin, to guide the core wire during winding.

In regards to claim 2, Lindsay as modified by Greczin teaches the applicator head further 23 comprising a wire guide spacer (flanges of 23, Lindsay).

In regards to claim 3, Lindsay as modified by Greczin teaches the applicator head further 23 comprising at least one wire guide pin (flanges of 23, Lindsay).

In regards to claim 7, Lindsay as modified by Greczin teaches at least four wire spools (Greczin).

In regards to claim 8, Lindsay as modified by Greczin teaches at least four wire guides 53 (Greczin).

In regards to claim 9, Lindsay as modified by Greczin teaches a wire payoff 5 (Lindsay).

In regards to claim 10, Lindsay as modified by Greczin teaches a pull roll assembly 10, 11 (Lindsay).

In regards to claim 11, Lindsay as modified by Greczin teaches a counterweight as seen in Figure 3.

In regards to claim 12, Lindsay as modified by Greczin teaches the applicator head further 23 comprising at least one wire insert (flanges of 23, Lindsay).

In regards to claim 14 and 15, Lindsay as modified by Greczin teaches at least four second wire guides (guides extending radially outward of guides 53).

It would have been obvious to perform the method steps of claims 23-25 when assembling the coil winding machine of Lindsay as modified by Greczin in its usual and expected fashion.

Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindsay as modified by Greczin as applied to claim 1 above, and further in view of Killian (US 5,538,197).

Killian teaches a coil winding machine with a pressure adjustment plate and a pressure pad 80,82,90.

Art Unit: 3654

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the coil winding machine of Lindsay as modified by Greczin to include a pressure element as suggested by Killian, to regulate the tension of the winding wire.

Claims 16-18, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindsay as modified by Greczin as applied to claim 1 above, and further in view of Kawatani (US 6,016,647).

In regards to claim 16, Lindsay as modified by Greczin fails to teach a wire straightener.

Kawatani teaches a wire straightener 9.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the coil winding machine of Lindsay as modified by Greczin to include a wire straightener as suggested by Kawatani, to place the core wire in the correct orientation for winding.

In regards to claim 17, the applicator head includes at least one wire guide insert (flanges of 23, Lindsay).

In regards to claim 18 the applicator head includes at least two wire guide pins (both flanges of 23, Lindsay).

In regards to claim 21, Lindsay as modified by Greczin and Kawatani teaches at least four wire spools (Greczin).

In regards to claim 22, Lindsay as modified by Greczin and Kawatani teaches at least four wire guides 53 (Greczin).

Art Unit: 3654

Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindsay as modified by Greczin and Kawatani as applied to claim 16 above, and further in view of Killian (US 5,538,197).

Killian teaches a coil winding machine with a pressure adjustment plate and a pressure pad 80,82,90.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the coil winding machine of Lindsay as modified by Greczin to include a pressure element as suggested by Killian, to regulate the tension of the winding wire.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evan H Langdon whose telephone number is (703)-306-5768. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (703)-308-2688. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3654

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ehl

*Kathy Matecki*  
KATHY MATECKI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600